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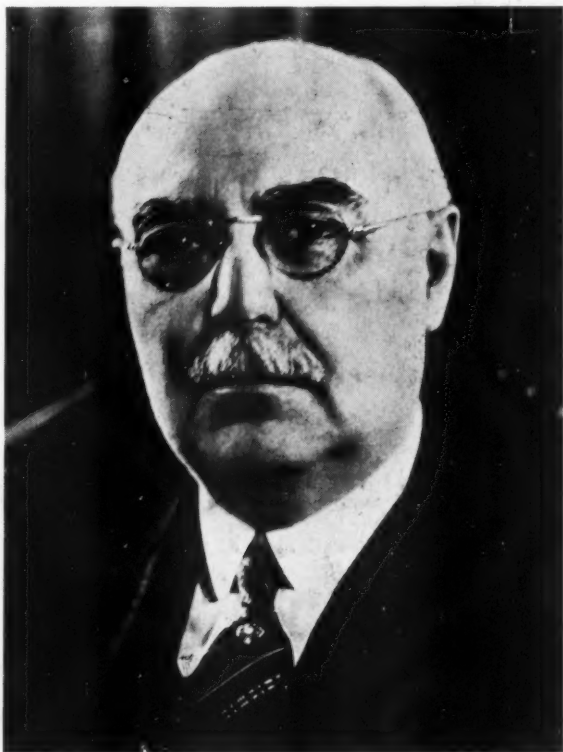
American *Journal of* Pharmacy

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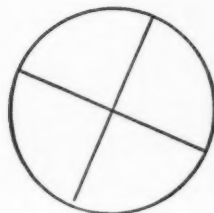
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¹Harris, S. C.; Ivy, A. C., and Searle, L. M.: THE MECHANISM OF AMPHETAMINE-INDUCED LOSS OF WEIGHT: A Consideration of the Theory of Hunger and Appetite, J.A.M.A. 134:1468 (Aug. 23) 1947.

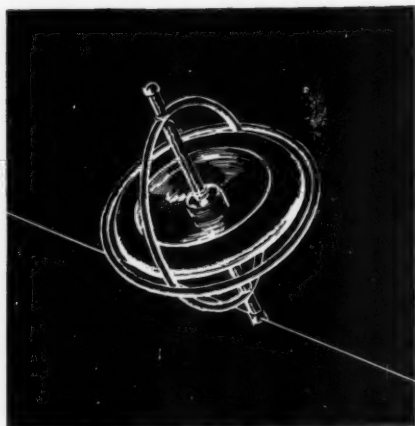
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AMERICAN JOURNAL OF PHARMACY AND THE SCIENCES SUPPORTING PUBLIC HEALTH

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IN MEMORIAM

JOSIAH K. LILLY

THIS issue of the *Journal* is dedicated to the memory of Josiah K. Lilly whose life and achievements place him among the immortals of pharmacy.

The editor in deciding upon the most appropriate means by which this dedication might be implemented could think of nothing that would be more fitting than to have two members of the *Journal* staff who knew Mr. Lilly intimately write a brief personal account of their impressions of this fine and noble character.

The first of these was prepared by Dr. Julius W. Sturmer, Professor Emeritus of Industrial Chemistry and retired Dean of Science of the Philadelphia College of Pharmacy and Science. Dr. Sturmer was a close friend of Mr. Lilly, their friendship having begun many years ago in Dr. Sturmer's native Indiana.

The second article was prepared by Dr. Ivor Griffith, President of the Philadelphia College of Pharmacy and Science. Dr. Griffith also knew Mr. Lilly well and in his position as President of Mr. Lilly's alma mater he had ample opportunity to learn the great affection and esteem which Mr. Lilly had for his college and its program. Few indeed know of the firm and generous support which Mr. Lilly throughout his lifetime gave his college during critical times of need. By quiet and unobtrusive means Mr. Lilly did much to support and improve this old and venerable institution, one of the few colleges that still remains today independent and free in the fullest sense. By so doing Mr. Lilly with his breadth of vision gave not only for the then present but also for the future of pharmacy and freedom everywhere.

A number of illustrations are used in this issue to acquaint our readers with Mr. Lilly's student days, his graduation and some few of his many gifts to his college. There are also some illustrations showing the growth of the great Lilly organization under his leadership and guidance.

Mr. Lilly is now gone but his work and his spirit live. We who knew him and his great love for his profession and humanity shall not soon forget all that he did, not only in the struggle to alleviate human misery and suffering but also in his quiet efforts to follow Him whose name all Christians bear.

L. F. TICE

JOSIAH K. LILLY

Recollections by J. W. Sturmer

MR. JOSIAH K. LILLY, one of our nation's great industrialists, was a friendly person, with a remarkable gift for the fostering of enduring friendships. He had a host of friends—scientists, literary celebrities, musicians, statesmen, pharmacists, merchants, employees of all classifications working in the Lilly plant, and people who were just folks. It was my great privilege to have been one of his host of friends.

I met him first in the spring of 1891, when he gave an address to the seniors in Pharmacy of Purdue University. The passing years have erased my recollection of what he said, but I can recall the scene—the speaker, Mr. Lilly, a young man approaching the age of 30, speaking with occasional reference to his notes, and concluding his address by inviting students and faculty to visit the Lilly plant, an invitation which was promptly accepted.

Our tour of the Lilly laboratories proved to be of high educational value. Mr. Lilly, our guide, saw to that. He was fully informed on all work in progress, and proved to be an expert in explaining the various manufacturing operations. Also, he had good co-operation, and it was evident that the employees accepted the chief of the laboratories as their co-worker and friend. He knew all the workers by name, and had a way of introducing them to us, with some complimentary remark about their expertness. His friendly relation with the employees was obviously very genuine and real. It made a deep impression on us visitors.

There is one memory picture incident to this my first visit to the Lilly plant which may be of interest. It is of Mr. Lilly showing us a room equipped as a chemical laboratory in which there was a young man engaged in making alkaloidal assays. The room, we were told, was for the Department of Chemical Control and Research, at the time a one-man department, but which was sure to grow, and that he, Mr. Lilly, as superintendent, was vitally interested in this new department. Verily, "Great oaks from little acorns grow"—sometimes. So must we conclude when we see the present-day magnitude of the staff engaged in research, and of the staff responsible for scientific control, and take note of the great

laboratories now provided for such important work. And is it not likely, also, that Mr. Lilly's early interest in chemical control and in research proved to be a factor in the rapid expansion of the plant?

Knowing that I had been appointed an Assistant at Purdue, he very cordially invited me to visit the plant and to visit him as often as I had the opportunity; and in the 21 years of my connection with the University I made many trips to the Lilly Plant. Some were made with a group of students, and some were made with the sole purpose of seeing Mr. Lilly and learning about new developments in manufacturing Pharmacy. As the years passed, his activities became more diversified, and in 1898, following the death of his father, Colonel Eli Lilly, and after 16 years of service as the chief of the laboratories, he became President of the Company. As an executive he was an outstanding success, for he had an intimate knowledge of the business, had vision, and had the ability of surrounding himself with a very competent staff of assistants. His achievements he attributed to the splendid work of his associates. Thus he remained the same friendly, unassuming personality that I had known when we both were younger and "When our hearts were young and gay." Only, he now had greater demands on his time. Notwithstanding his full schedule he would find time for a visit when I came to the plant and would take the trouble to personally conduct me through the laboratory to show me new equipment which he thought would interest me. I remember his saying, years later, and when we were sitting on his porch at his summer home, "There are many persons who can stand up under disappointment and failure; there are not so many who can stand promotion to a position of authority." He was one who could.

When I left Purdue University in 1912 to seek my fortune in the East—a step of which he heartily disapproved—my visits with Mr. Lilly were naturally limited to the summer months. But when in 1916 I became a member of the faculty of his alma mater, our interchange of letters became more frequent, and they sometimes dealt with matters pertaining to the College, for he was a most loyal alumnus, deeply grateful for the training and the inspiration which his college professors had given him. But he was interested also in Purdue University, of which he was a Trustee for about ten years, and in other institutions of learning in the Middle West. He

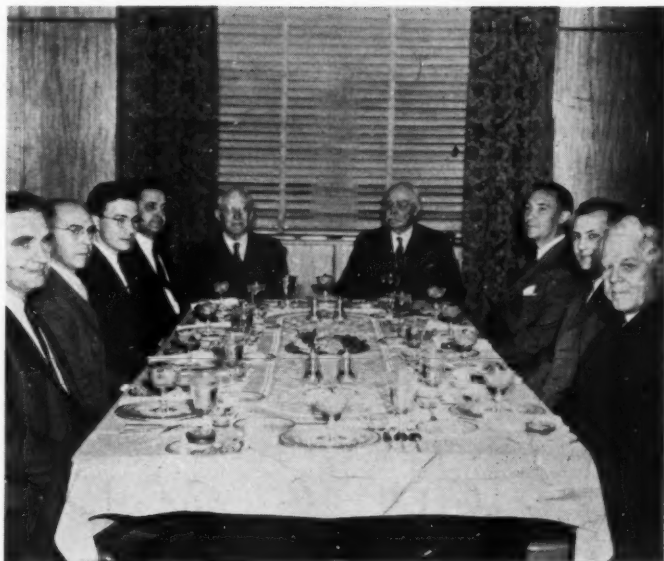
had the conviction that in supporting education and scientific research he was helping to build a greater America.

It is not my purpose to enumerate the generous gifts which Mr. Lilly made to his alma mater, to Purdue, and to other colleges. I would, however, say that he was really and truly a cheerful giver; and that he was particularly happy when he could offer a gift as a surprise. In illustration: On one of my visits he inquired, had I seen the Daniel Chester French statue of Abraham Lincoln in the Lincoln Memorial in Washington, and would a statue of old Abe be suitable for a place in a college building? I thought the questions were academic, and answered, yes, I had seen it, that I deemed the statue a grand and inspiring object of art, and that a statue of Old Abe, of suitable size, would be of inspirational value in a college building or on a campus. "Good", said Mr. Lilly, "we are ordering replicas of the Daniel Chester French statue, of proper size for a college foyer or auditorium, and one will be shipped to the College at the corner of Kingsessing and 43rd street in Philadelphia."

Some years later there arrived a letter from Mr. Lilly with the information that he had acquired from the David Costelo estate a collection of ornamental apothecaries' shelf ware and other art objects, which he would direct to have shipped to the College if we wished him to do so. And so there came to the College, without solicitation or suggestion on our part, the Lincoln statue and art objects from the David Costelo estate to add dignity and beauty to the foyer of our College building.

Mr. Lilly was deeply interested in the welfare of the employees of the Company. He frequently talked about making the laboratories pleasant places in which to work; and during the depression years his greatest concern was to avoid wage cuts and dismissals. Fortunately such measures did not have to be taken and he was very happy about it, referring to the matter on a number of occasions.

He was proud of his two "boys," Eli and J. K. Jr. It made him happy to see his sons serving the Company in positions of responsibility, serving with ability and enjoying it. This was a topic that he brought up at times coupled with the statement that he would soon retire, and that he hoped to see his son Eli succeed him as President, and his son J. K. Jr., elected to a Vice-Presidency. In 1932 these changes were made in the Lilly corporation, and J.



Mr. Lilly and Dr. Sturmer seated together at a luncheon in Dr. Sturmer's honor on one of his many visits to Indianapolis.

K. Sr. was elected Chairman of the Board of Directors. He was now The Grand Old Man of the Lilly organization, rich in achievement and in honors, admired, respected, and held in affectionate regard by his many friends. He now had time for such interesting projects as the collecting of Stephen Foster manuscripts, a service of love which had as a by-product the result of re-popularizing the Stephen Foster songs. There was time also for other altruistic enterprises, and time to devote to his friends. So his declining years were happy and fruitful years, rounding out the career of a man who contributed much toward making this world a better place in which to live, and whose life was an inspiration to all who knew him.

It was my privilege to be one of his friends for 57 years—when he was the young Superintendent of the Lilly Laboratories, when, years later, he was the eminently capable Head of the Firm, and when, after retirement from the Presidency, he gave so generously of his time and of his substance to the furthering of patriotic and philanthropic enterprises. In this long span of time my admiration and affection for him deepened with the passing years. Josiah Kirby Lilly was a truly noble American.

JOSIAH KIRBY LILLY

"All Hail Affection"

An unrestrained, intimate bit of written remembering by
Ivor Griffith

THE caption "All hail affection" was lifted from a friendly letter written by the late and truly lamented Josiah Kirby Lilly, once of Indiana, and now residing where mortal toil has ceased and spirit rest begun.

I had been rather seriously ill when, in his kindly hand, he wrote this note and sent it to me on my sick bed. The letter is thus shared with all who, now or long after now, will have the privilege of reading it. Of course it is personal, and some, of greater delicacy than mine, would view it as too intimate to publish. But here it is, so warmly J. K.'s, so clearly, so naturally J. K.'s that I thrill with the joy of sharing it.

"My Dear Friend—

We were much distressed and concerned by your illness.

Somehow you only come to mind as a moving body with "vim and vigor," and living abundantly.

Our constant prayer is that your wonderful constitution will see you past this difficulty, again to be our own welcome guest in our home. All goes well here in the warm sunshine and gentle breezes but will be more enjoyable when word comes that you are well on to full recovery. Reports from home is to the effect that all goes merrily—"big business," new plant rapidly taking shape, and new items developing!

Spent some time today with some fine clinicians helping us discover the real usefulness of 'Propyl-Thiouracil' (not sure of that spelling).

Life is so full of interest that one dislikes the prospect of leaving it. Suppose you and I covenant together to stick around for a period, as long as we can, and look each other in the face?

Best of good wishes from your Hoosier contingent!

All hail affection!!

Feb. 6, 1947

J. K. Lilly"

He wrote this letter when the shadows of his life were at their great lengthening, yet his kind and gentle heart had been manifest long before this time of tranquil gloaming, for he had worked hard in the multifarious good offices wherewith he served his fellow-man.

For instance let me tell you what he did with orchids—and how he wrought a subtle, wonderful change in the crass course into which American popular music was being misdirected. Single handed, he returned Stephen Foster's Heaven-sent songs to American hearts and American lips. These "gifts to the people" have been described before, and here is a transcript, of part of a broadcast, winnowed a little while ago from a Philadelphia station, into the ethereal expanse, and now re-set in static print:

"Announcer: Well, let's have the story, my friend.

I. G.: In 1882, a youngster left the halls of the old Philadelphia College of Pharmacy—a goodlooking youngster, clean-minded and starry-eyed. The goodness of good Indiana people was in his head and heart—and he did things then, as he still does, in such wise, that no one missed the fact that he was a conscious, conscientious citizen of the kingdom of everlasting light. After young Josiah's graduation he joined his father, Colonel Eli Lilly, at the little drug factory in Indianapolis, where he soon turned his college knowledge to such account that the Lilly plant began to grow in research and in control and production to such an extent that the red 'Lilly' on the label of the medicinal container is now a symbol, the whole world over, for decency, drug-worth and double dependability. And their present plant occupies acres and acres of ground and employs thousands of men and women.

Lilly put insulin on the production map. Lilly today sends its blessed plasma, penicillin, vitamins, barbiturates, and a thousand other therapeutic blessings to every corner of the earth.

A: Well, go on—we're impatient—in the meantime isn't it a fact that Mr. Lilly sent his son Eli, in proper season, to the Philadelphia College so that he, too, might have the proper traditional background.

I. G.: Yes, indeed, and Eli Lilly of the class of 1907, is now president of the world famed house of Lilly—and I say

that advisedly—for Lilly *is* in big business—and in the great heart of research as well. It is the largest and most unique house of its kind in all the wide, wide world.

Now, as the years rolled on, Lilly Senior trusted the business to his sons Josiah and Eli, and it prospered, and Lilly Senior looked for avocations. His first hobby was Stephen Foster, that beloved American weaver of songs immortal. During those few years Mr. Lilly made America Foster-conscious. His collection of Fosteriana, the greatest anywhere, he gave to an endowed and beautiful Foster Memorial Hall at Pittsburgh's great university. He presided over the session in New York where the Hall of Fame was rightfully enriched with a bust of the long neglected Stephen Foster.

'Jeannie with the Light Brown Hair,' 'Old Dog Tray,' 'My Old Kentucky Home' and dozens of Foster's beautiful hymns of love and longings were restored to American ears and hearts through Mr. Lilly's persistent intelligent ministry.

His 'Stephen Foster Hall' at Indianapolis is a shrine where fortunate wanderers may unburden their hearts and rest in a murmuring air of Foster's poignant music magic.

A: You haven't said 'quote' or 'unquote' yet, Doctor—but all you've said is poetry.

I. G.: Just be patient, the quote is just around the corner. Mr. Lilly soon cultivated another hobby, for you must know that this man was uneasy with ease—and in essence, versatile. He turned to growing orchids at his home conservatory. And growing orchids calls for a scientific technic, for their beginnings are so microscopic, and their disciplined growth so asking of care and patience. You see, they don't start from seed or bulbs or cuttings. Oh, no—they start from scratch—a *scratch* on an agar gelatin culture plate where the so-called almost invisible 'orchid' germ is planted, just as the bacteriologist plants and grows his colonies of germs. From there on to the final gorgeous, glamorous, exotic queen of flowers, progress is slow, treatment tender, and success a matter of science.

But Mr. Lilly was not satisfied with keeping beauty so circumscribed at home. He wanted it distributed, knowing that

beauty multiplies by division. So he subsidized a pair of young Scandinavian florists, built them an orchid house, scientific in every respect, just outside of Indianapolis.

There they now grow perfect orchids. I visited the establishment with Mr. Lilly and I was stunned with the glory of its products. But more than all else was my admiration for his choice of name for this brand of perfect blooms. Out of his heart he named them Stephen Foster Orchids. Mind you now, this is not what you radio folks call a commercial. Heaven forbid—for Stephen Foster orchids are not advertised. Their little orchidary cannot supply the middle west's demand.

I'm just 'plugging' in the interest of sentiment and beauty.

A.: Of course you are and I'm thrilled to know that the memory of so sweet a singer as Stephen Collins Foster is so touchingly, so tastefully, so beautifully preserved. For Foster must have sensed beauty to have so much to give away.

I. G.: Yes, he did—yet his generation hardly acknowledged his timeless gift—for you know he died a lonely, poor man, on a miserable cot in a New York hospital. A much clutched purse with a few pennies were found in his threadbare pocket, after his death. You may see the purse and the pitiful pennies in the Pittsburgh Memorial Hall and also the pathetic line scribbled with his pale hand on a wrinkled bit of writing paper. Those five words delivered his last message—namely, 'Dear friends and gentle hearts.' And here is a little verse which I now dedicate to Mr. Josiah Lilly—and his 'Orchids to Stephen.' It is entitled:

* * *

'Dear Friends and Gentle Hearts.'

Orchids to Stephen?

A gallant compliment,
To one whose wealth was spent
So freely—where'er his genius went!

Orchids to Stephen?

Why not?
Stephen, whose songs
Still find in every heart
A tender, all-redeeming part!

Orchids to Stephen—Yes! Why not?
Some reimbursement for that tragic cot;
Some recompense for that pathetic purse
He left—when Death, the kind old nurse
Restrained his breath and closed his tired eye
Tenderly—knowing he would *never* die,
But live upon this earth as long
As man finds comfort in a tender song.
Orchids to Stephen? Of course!!
And every perfect bloom endorse
The music Stephen Foster wrought
That generations might be brought
To know—that Beauty truly starts
Within 'Dear Friends and Gentle Hearts.'

A.: Doctor, I agree with you—oh, so whole-heartedly and yet so sorrowfully, when I remember that too often humanity delays with its tribute of roses and lilies and orchids until the one so honored is dead and unaware.

And to the Lillys of Indianapolis,—Station WFIL in Philadelphia, home of their Alma Mater, sends greetings galore."

* * *

Mr. Lilly was born at Greencastle, Indiana, Nov. 18, 1861, the son of Eli and Emily Lemon Lilly. From 1874 to 1876 he studied at Asbury College, now DePauw University. When he was 12 years old the family moved to Indianapolis. To ready himself for his future business life, which required professional as well as business training, he attended the Philadelphia College of Pharmacy from which he graduated with honors in 1882. His thesis (*On Aralia Spinosa*), then a prerequisite to graduation, was presented in his own Spencerian script. On Nov. 18, 1882, he married Miss Lily M. Ridgely at Lexington, Ky.

The first Mrs. Lilly died in 1934 and on June 29, 1935 he married Mrs. Lila Allison Humes in Indianapolis, who survives him and who through the long evening of his life was his delight and his beloved companion.

He was his father's fourth employee. The Lilly firm now employs thousands of scientific and technical workers, housed in

modern buildings, and overseered with kindness and appreciation. No death in all history cast so deep a gloom on Indianapolis in Indiana, as that of Mr. Lilly, and his employees knew that no matter what might follow here had gone home their utmost, dearest friend.

In 1876 Mr. Lilly, as an errand boy, entered the drug manufacturing firm established by his father, Colonel Eli Lilly. From 1882, following his graduation from the Philadelphia College of Pharmacy, to 1898 he was director of his father's manufacturing Laboratory.

One of his first acts as director was to engage a full-time chemist for control work. Through his efforts Eli Lilly and Company, in 1883, offered the drug trade a line of assayed and standardized fluid extracts, the first standardized extracts available to pharmacists. In 1890 he established a botanical laboratory with a full-time botanist for the control of crude drug stocks.

On the death of his father, Colonel Eli Lilly, in June, 1898, J. K. Lilly was elected president of the company. As president he was confronted with the problems of finance and marketing. He took over the direction of the sales force which then numbered twenty men and traveled widely over the United States visiting wholesalers. Many of Eli Lilly and Company's oldest distributors were sold their initial stocks by J. K. Lilly.

In 1900 the familiar red Lilly trademark, a facsimile of Colonel Lilly's signature, was adopted and publicized by J. K. Lilly.

Under Mr. Lilly's personal direction the biological laboratories at Greenfield, Indiana, were opened in 1914. The Lilly biological line appeared on the market the following year.

Always interested in research, Mr. Lilly was one of the pharmaceutical manufacturers to see that the production of new and better medical products was vital to the survival and growth of the pharmaceutical business. Due to his efforts a new science building was dedicated and devoted to scientific control and research in 1911. It provided laboratory facilities for advanced work in pharmacy and chemistry and pharmacological research in the manufacturing field.

When the research laboratories outgrew their quarters a new research building was completed in 1934. Mr. Lilly was singularly honored by having scores of the most important men doing research in the United States and many foreign countries attend the dedi-

cation ceremonies. This building, dedicated to him, is a tribute to his great work in developing laboratories for research and control and giving the physician highly scientific products of great therapeutic value.

He became chairman of the Board of Directors in 1932, having served thirty-four years as its president. When Mr. Lilly became the head of his company in 1898, it was a relatively small business; but, under his management, Eli Lilly and Company became one of the outstanding industries in the pharmaceutical field, with international distribution. Of his origination, the great Lilly Loyalty plan of pharmaceutical sales, through and to pharmacists, and pharmacists only, was the corner stone, the substantial, durable foundation of the Lilly booming business.

Mr. Lilly was interested in many civic movements. On the roll of charter members of the Indianapolis Chamber of Commerce J. K. Lilly's name was seventh. Later he served on many important committees and as president of the organization.

He headed the campaign to raise funds for the present Y. M. C. A. building in Indianapolis and was one of the chief contributors. During World War I he was chairman of the most successful Liberty Loan drives in Marion County. He was chairman of the first Community Chest campaign and the success of the Local Red Cross drive in World War I was due, in large degree, to his energetic direction and personal contributions. When the United States entered World War I in 1917, Mr. Lilly proposed the establishment of a military hospital as a memorial to his father, who was a colonel in the Civil War. His personal contributions and company gifts resulted in Lilly Base Hospital No. 32, which rendered notable service in France. He was a co-founder of the Indianapolis Foundation, an organization to receive and administer bequests for philanthropic purposes in a wise and orderly manner and served as its chairman for a number of years.

He was a life member of the Philadelphia College of Pharmacy and Science, and a constant friend and benefactor of that Institution, of which he was genuinely fond and proud. He served for ten years as a trustee of Purdue University, and was a promoter and co-founder of the Purdue Research Foundation.

In recognition of his services to civic, scientific, educational, and cultural organizations, eight colleges and universities conferred

honorary degrees upon him: Master in Pharmacy, Philadelphia College of Pharmacy and Science, 1926; Doctor of Laws, University of Pittsburgh, 1933; Doctor of Science, University of the South, Sewanee, Tennessee, 1935; Doctor of Laws, DePauw University, 1935; Doctor of Laws, Butler University, 1936; Doctor of Laws, Indiana University, 1936; Doctor of Laws, Purdue University, 1939; and Master of Science, University of Michigan, 1941. He was also recipient of other honorary scholastic degrees from famous institutions. In 1942, he was awarded the Remington Medal for distinguished service in pharmacy.

As previously mentioned, Mr. Lilly became nationally known in music circles through a hobby which had its beginning in his fondness for the haunting yet charming melodies of the folk songs of Stephen Collins Foster. Over the years he acquired the most complete set of first editions of Foster's music in existence and published many sets of replicas of these first editions which he distributed, without charge, to the principal public and college libraries and to music schools in the United States and other English-speaking countries.

Mr. Lilly's famous Foster collection, containing more than 10,000 items and said to be one of the finest examples in existence of collections pertaining to one author or composer, was presented by him to the University of Pittsburgh, where it is permanently housed and displayed in a beautiful Foster memorial building provided by Mr. Lilly and the citizens of Pittsburgh.

He was a member of Christ Church of Indianapolis. His clubs were the Columbia, Indianapolis Athletic, Woodstock, and Wawasee Yacht Clubs. He was a member of the Society of Indiana Pioneers; Indiana Historical Society; Newcomen Society of England, Orchid Society of California; Art Association of Indianapolis; Indiana State Symphony Society; English Foundation; Military Order of the Loyal Legion of the United States and past-commander of the Indiana Commandery; and the United War and Community Fund Board.

He received the Staff of Honor citation, awarded on February 3, 1939, by the Indianapolis Chamber of Commerce. The Commander's Cross of the Royal Order of St. Sava was conferred on Mr. Lilly on November 12, 1939, by P. Cabric, Royal Yugoslav Consul General at Chicago, in recognition of Mr. Lilly's Foster work in general, and in particular because of his having presented a sup-

ply of band arrangements of Foster songs to the Yugoslav government.

And now I conclude this all-too-meager a tribute to so good and so great a man with another personal issue, again, excerpts of letters that one more highly, more finely attuned than I, might never want to give to print. They are excerpts from letters of sympathy sent to his sons and to his widow—all of whom share his philosophies—all of whom, in their bereavement, know that Mr. Lilly when he went away, left, convinced that they would carry on, in spirit and in truth, those clean-cut traditions of the House that Lilly built.

These are the excerpts:

* * *

"Upon my return from a rather distressing trip in Europe I received the sad news of the death of your Father.

From one of his recent letters to me, written in longhand, I quote: 'Life is so full of interest that one dislikes the prospect of leaving it. Suppose you and I covenant together to stick around for a period, as long as we can, and look each other in the face? All hail affection!!' It is hard to believe that one who embodied so much greatness of intellect and Soul had to be called away, yet—of course, death is finally inescapable. To me, his passing enriches heaven with a Saint and deprives earth of one of the greatest, serenest, good men that I have ever known!

Do know that I send my heartfelt sympathy to you in this sad day of bereavement. Many years ago things seemed bleak, so very bleak to me too when in the brief span of four years I lost my dear parents, my beloved wife, and a fine brother. Truly was I distressed and deeply hurt. Yet here is what I wrote. Here is what comforted me.—

Think of it as Sunset—friend
There is no Death!
A Glorious Sunset at the end
Hushing the breath;
Low clouds that loomed upon his day
At evening, radiance win—
And Heaven, itself, so glad to say
'Come in,' *Good Friend*, 'Come in.'

* * *

And so the letter ends—and so, in majesty, a full life ended—to begin, again in Glory.

JOSIAH KIRBY LILLY rests, but his works of love, and grace and goodness go marching on and on!

All Hail Affection!!

On the following pages are some illustrations pertaining to Mr. Lilly's days as a student, others showing some of his many gifts to his College, and finally some depicting the growth of the Lilly organization during his lifetime.

Indianapolis Decr Jan'y 30. 1881
This is to certify that Josiah Kirby Lilly was employed by me in the manufacturing Pharmaceutical business for the period of four (4) years and that he is of good moral character

Eli Lilly

A testimonial from Mr. Lilly's father presented to his college.

GRADUATING CLASS, Sixty-First Session, PHILADELPHIA COLLEGE OF PHARMACY, 1881-1882.

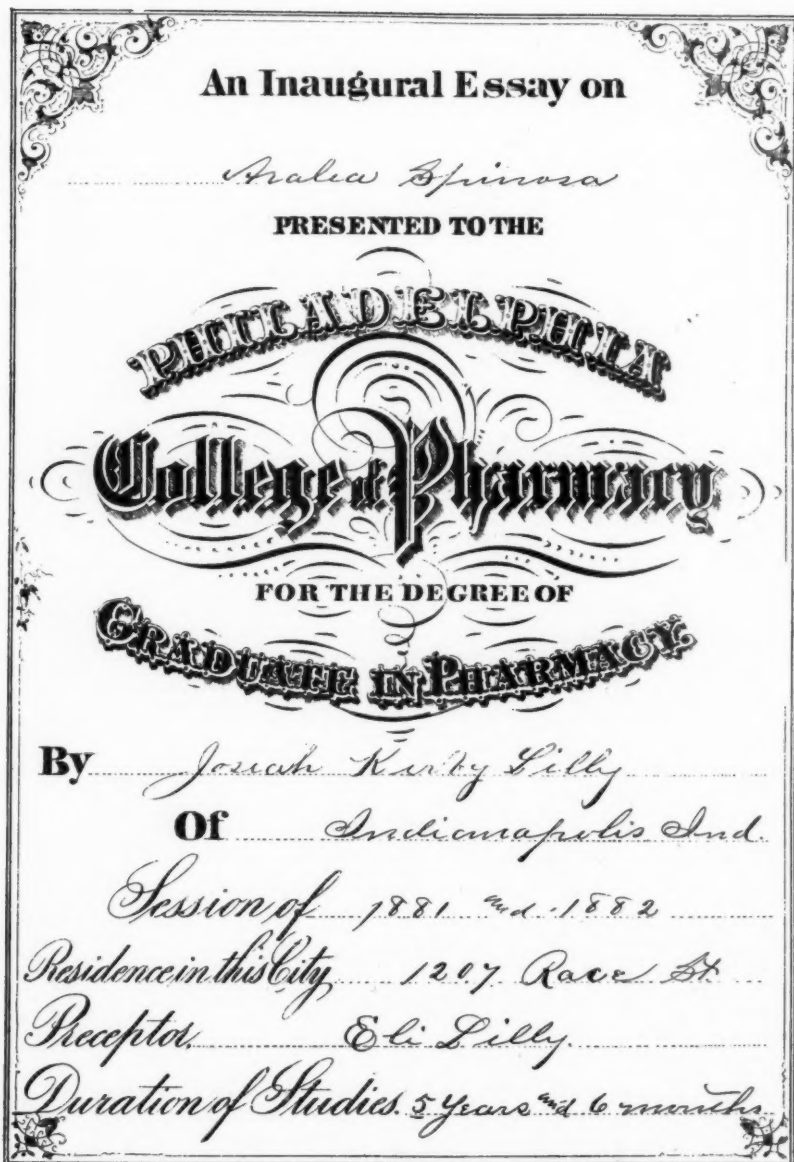
NAME.	SUBJECT OF THESIS.	STATE.
Acker, Charles Niskey.....	Elixiria.....	Pennsylvania.
Barkhuus, James Addison.....	Laboratory of a Pharmacist.....	New York.
Behringer, Albert Christian.....	Ferri et Ammonii Citras.....	Pennsylvania.
Binns, John Pemberton.....	Pharmacy.....	Pennsylvania.
Bird, Wellington Henry.....	Coating of Pills.....	Pennsylvania.
Bohn, Charles Henry.....	Saccharum.....	Ohio.
Bower, Collier Lewis.....	Brandied Tinctures.....	Pennsylvania.
Bower, John Marion.....	Braxius Americana.....	Pennsylvania.

GRADUATING CLASS.

123

NAME.	SUBJECT OF THESIS.	STATE.
Lilly, Josiah Kirby.....	<i>Aralia Spinosa</i>	Indiana.
Lyman, David Christopher.....	<i>Advance of Science</i>	Kentucky.
McAllister, Alexander.....	<i>Extractum Carnis</i>	New Jersey.
McDougal, Robert Davis.....	<i>Acid Phosphoric Dilutum</i>	Illinois.
McGowan, Samuel Harbeson.....	<i>Rad Taraxaci</i>	Pennsylvania.
Mannel, Henry Conrad.....	<i>Hints on Prescriptions</i>	New York.
Matthes, Franklin Augustus.....	<i>Primitive compared to Mod. Pharmacy</i>	Pennsylvania.
Matthews, W. Leaming.....	<i>Pharmaceutical Preparations</i>	Pennsylvania.
Max, William Harry.....	<i>Prescriptions</i>	New Jersey.

The graduation roll of the Class of 1882.



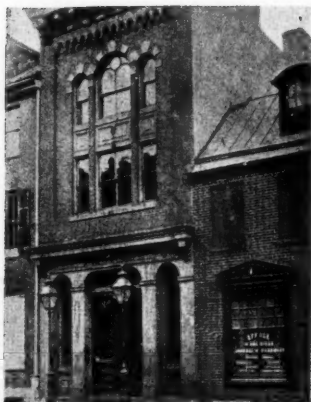
The title page of Mr. Lilly's thesis.

Aralia Spinosa.

Noticing the great differences in the results of former investigations of Aralia bark, the writer performed a series of experiments, in hopes of determining the nature of the principles, to which the drug owes its slightly aromatic and bitterish and acrid taste.

The odor of the bark proved to be due to a volatile oil, present in very minute quantity.

By distilling eight ounces of the ground drug with water, a few yellowish green globules of the oil were separated.



The College that Mr. Lilly attended.



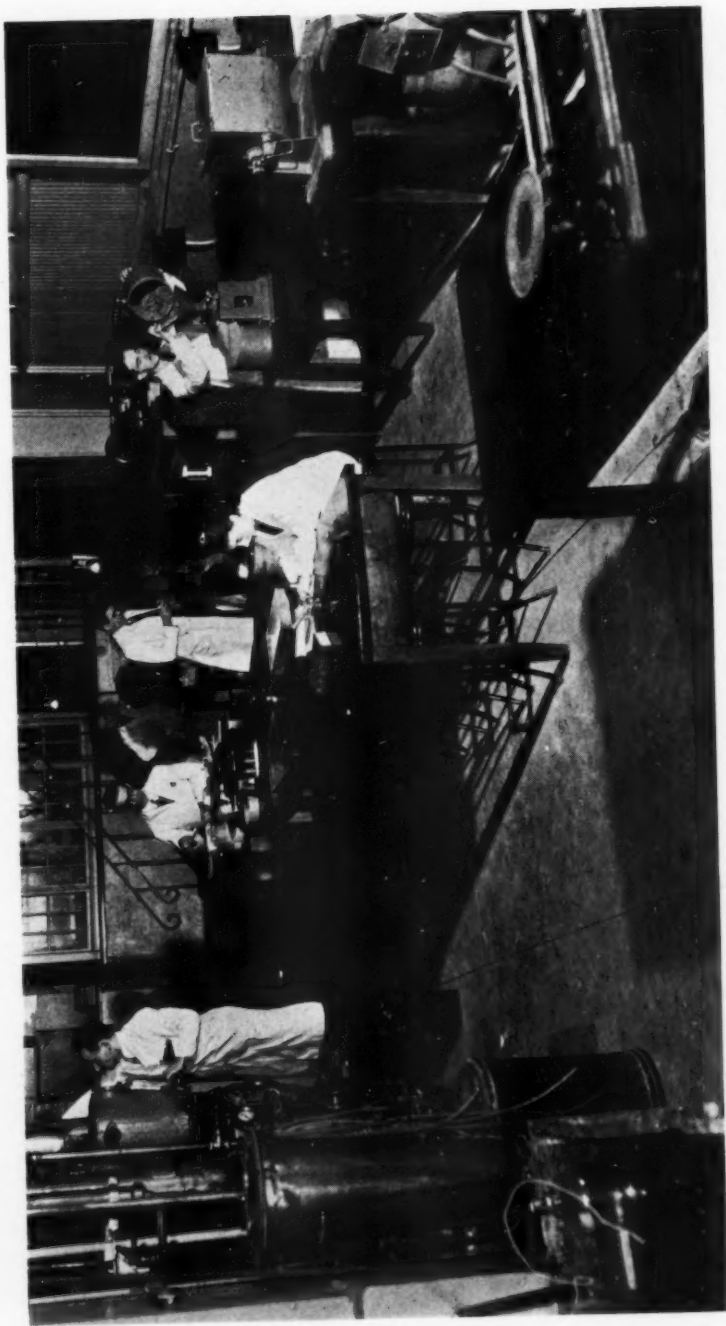
The College today.



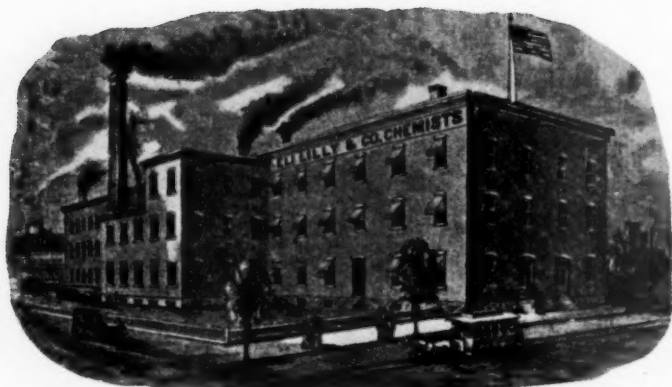
Part of the Lilly-Costelo collection of drug jars given by Mr. Lilly to his alma mater.



The Lincoln Memorial Statue in the College Foyer presented by Mr. Lilly.



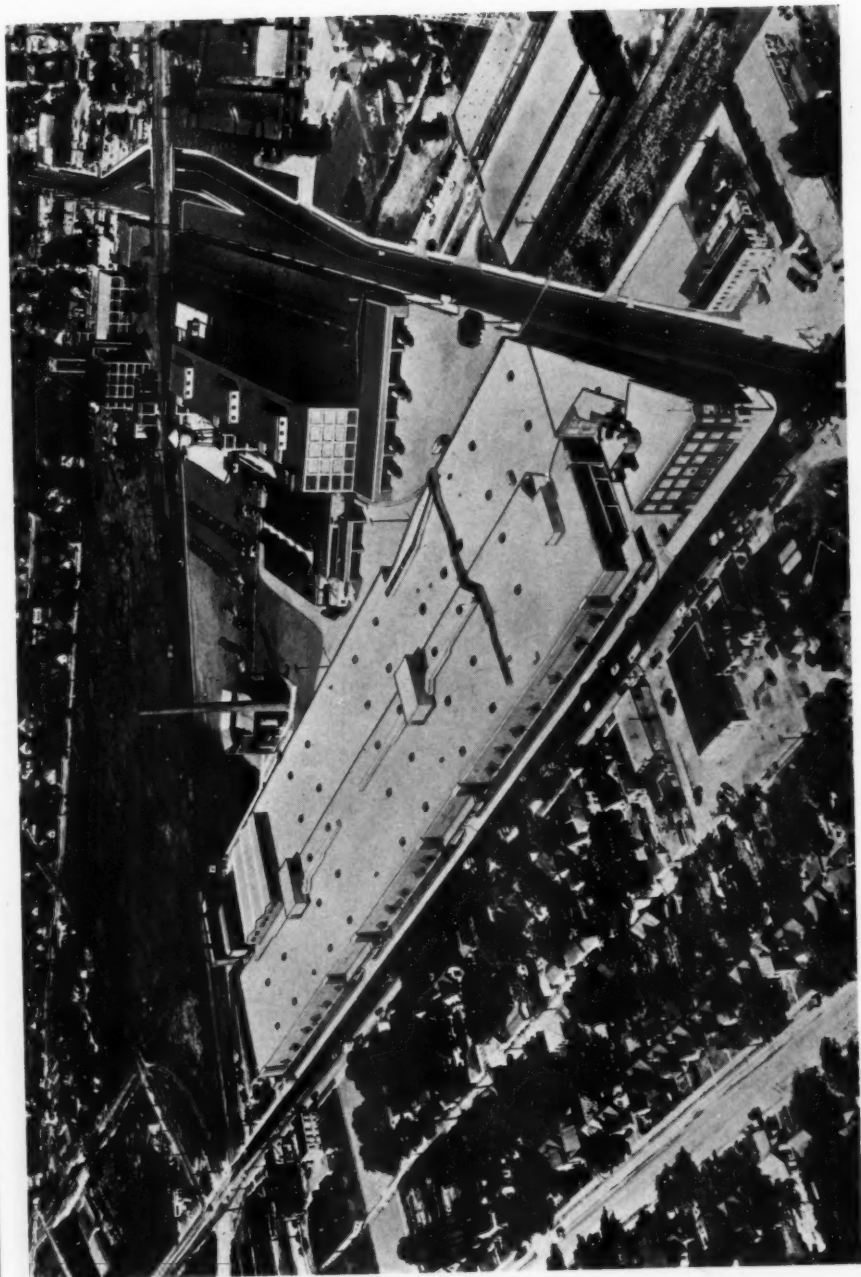
The Remington Memorial Manufacturing Laboratory equipped by the generosity of Mr. Lilly, in memory of the late Dean Remington.



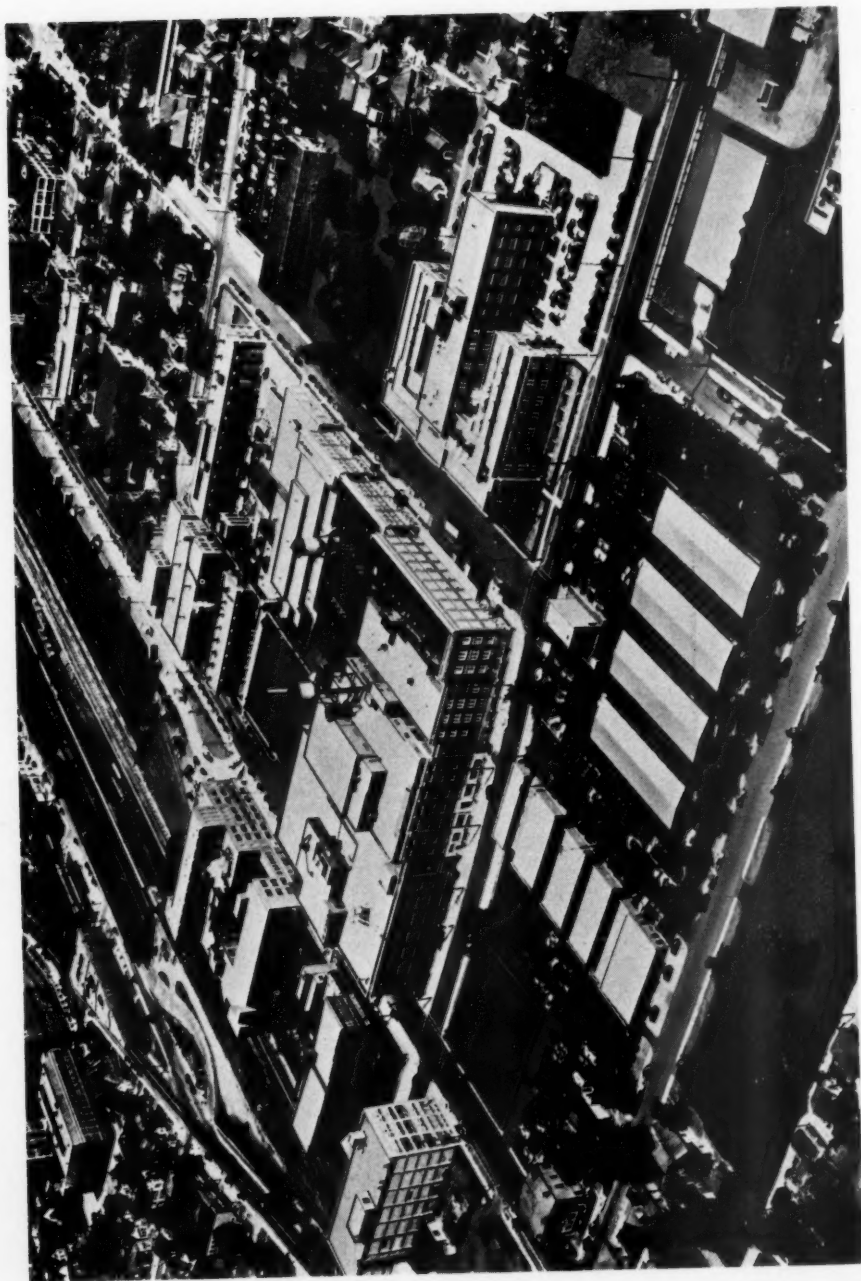
The Lilly plant during Mr. Lilly's early years.



The Lilly Biological Laboratories today.



An aerial view of part of the modern Lilly manufacturing plant today.



Another part of the vast Lilly plant today.

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* ®



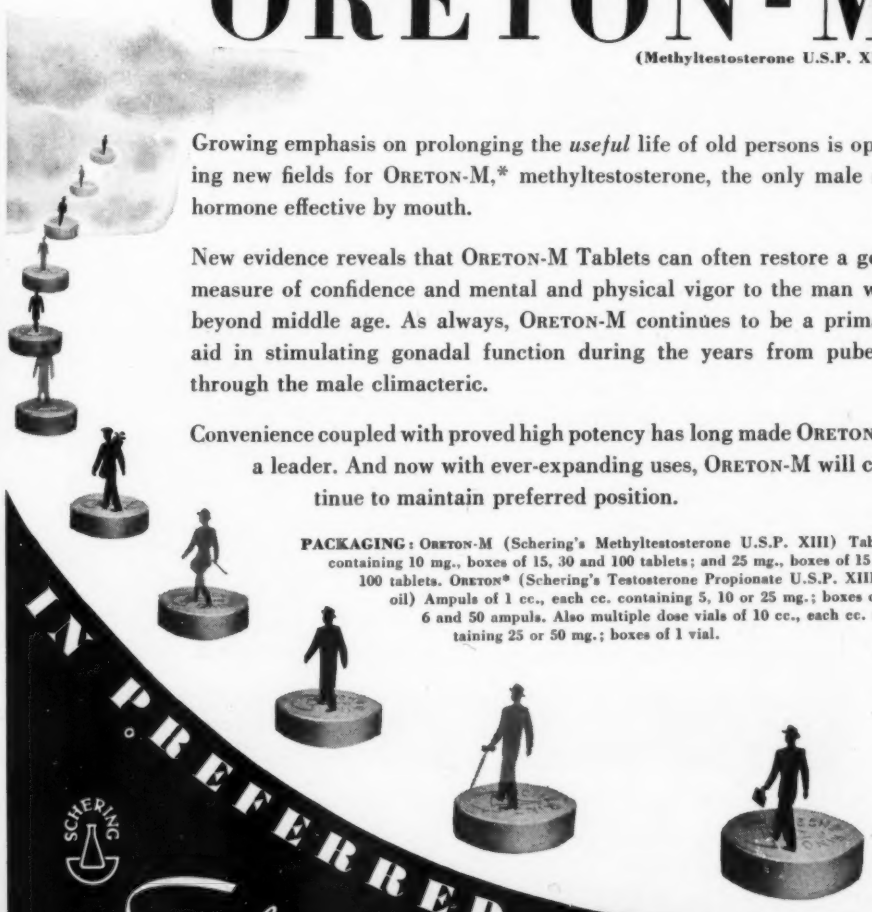
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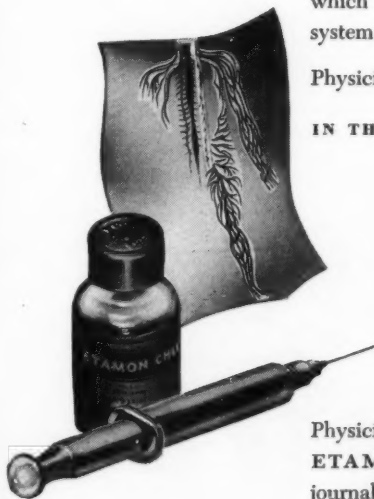
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